ABSTRACT

Investigations of a juniper fence located at Powder Springs, in southwest Wyoming, suggest it was constructed in the late 19th century and used as a horse pasture. It was initially speculated the fence was the remains of a late prehistoric or proto-historic big game procurement complex. However, tree-ring dating provided late 19th Century dates for construction of the fence. Historical research indicates that during the late 19th century, Powder Springs was occupied by an outlaw element which used the area as a hideout along the “Outlaw Trail”. Notable among those who frequented Powder Springs was Butch Cassidy. The remains of three rock cabins, a dugout, and a round horse corral provide substance to the historical accounts. The fence encompasses Upper Powder Spring and two of the rock cabins, one of which may have been built by Cassidy.

INTRODUCTION

Tree-ring dating was used to date construction of a huge, oval enclosure made of stacked juniper known as the Upper Powder Springs Drift Fence. The fence trends along the upper slopes and sides of two parallel, juniper-covered ridges, encompassing a broad valley nearly two miles long and over one-half mile wide. Initial speculations by the senior author and others assumed it was a prehistoric or early historic big game procurement complex used by Shoshone or Ute Indians. These speculations revealed our biases for the archaeological record, and worse, against the historical record which ultimately became the crucial data base regarding the origin and use of the fence. The structure is located in southwest Wyoming, five miles north of Powder Wash, Colorado (Figure 1).

Preliminary investigations suggested that construction of the fence might be dated through tree-ring analysis. Pursuant to this goal a research proposal (Darlington and Murcray 1993) was submitted to the Bureau of Land Management. The approved proposal allowed the collection of wood samples from the fence which could be dated using standard tree-ring dating techniques. Tree-ring samples were collected in June 1994 and their analysis was conducted during the winter of 1996/1997. A technical report detailing the results of the complete analysis was submitted to the Bureau of Land Management (Darlington and Bodyfelt 1998).

SITE SETTING

The Drift Fence is located in the juniper breaks known locally as the Powders (Murcray 1993), south of the Adobe Town badlands in southern Sweetwater County. Juniper (Juniperus scopulorum) dominates the higher ridge slopes and dense stands of sagebrush (Artemisia tridentata) and various seed grasses cover the lower valleys between the ridges. Erosion and frost fracture of the sandstone caprock has formed rugged rock faces and rims along the upper slopes and ridgetops, which contrast with the broad, open valleys below. Soil is sandy and somewhat alkaline, especially in the lower areas where drainage is poor. Upper and Lower Powder springs are the main sources of surface water in the study area. Both are located on the North Fork of Powder Wash, an intermittent creek fed by springs and runoff. Powder Wash crosses the eastern edge of the valley encompassed by the Drift Fence and Upper Powder Spring is located within the confines of the Drift Fence (Figure 2). Lower Powder Spring is located two miles down stream. The local area is referred to in the historic literature as either Powder Wash or Powder Springs.

The Powders historically attracted a variety of big game including elk (Cervus elaphus) and mule deer (Odocoileus hemionus), both of which are present today. Bighorn sheep (Ovis canadensis) and bison (Bison bison) occupied the area through the
early historic period. Both bison and bighorn sheep were hunted out by the 1870s. Pronghorn (*Antilocapra americana*) are common in the more open areas in the Powders and on the plains to the north and south. They would have been the most common big game animal throughout the prehistoric and historic periods.

**SITE DESCRIPTION**

The Drift Fence is constructed of junipers which have been cut and stacked to form a low barrier that trends along the top and upper slopes of two, parallel, east/west trending ridges. Separating the two ridges is a broad, open valley (Figure 3). The best preserved segments are located along the rocky, upper slopes bordering the valley. The structure can be followed across the open areas by light scatters of wood and several posts which have survived both the natural elements and firewood gathering by campers and sheepherders. The known extent of the fence is 2.0 miles long and 0.7 miles wide.

Construction was simple. Standing live and dead trees were used as posts, with poles placed in notches formed by the branches to make fence rails (Figure 4). Much of the wood used in construction was standing or fallen dead trees that were collected without the need for cutting. In some cases, live limbs were cut partially through and bent over to form a rail. Those limbs and trunks which were intentionally felled exhibit the clean cuts typical of steel axes. Saw cuts were not observed. Natural decay has reduced the present height to a row of entwined branches and poles one to three feet high. Based on the standing portions of the fence, the original height was four to five feet. Where possible, the fence was routed along rock rims and past live junipers which became part of the structure. The effort expended to construct the fence was considerable, but if spread over several months, would have required the labor of only one or two individuals.
RESULTS

Initial speculations regarding use of the fence were based on its similarity to other wood structures of known function and age, including protohistoric bighorn sheep traps (Darlington 1984; Frison 1991), pronghorn traps (Pendleton and Thomas 1983; Frison 1991; Arkush 1995), and late historic horse traps (Price 1990, 1996). The bighorn sheep and pronghorn traps generally date to the 18th and early 19th centuries, while the horse traps were operated into the mid 20th century. Consequently, construction dates which could be compared to the historical, ethnographic, and archaeological records were critical to interpretations.

Seven tree-ring samples (slabs) were collected on June 11-12, 1994. All collected specimens are juniper (Juniperus sp.) which had been cut during Fence construction, affecting or stopping growth. Two tree-ring specimens (DC1 and DC5) continued to grow after being cut for use in the Drift Fence and were alive when collected for this study. These are limbs or trunks which had been cut partially through and bent over to form fence rails. Because the limbs were not completely severed, they continued to grow until sectioned for this study in 1994. Direct tree-ring counts from the last complete growth ring to the trauma caused by fence construction were applicable to these specimens. All dates are calculated from 1993 which corresponds to the last complete growth ring prior to collection.

The other five specimens are limbs or trunks which ceased growth when they were cut for use in the Fence. Skeleton plots and graphs of the raw ring widths from these specimens were compared to the two living specimens, but no reliable correlations could be made. This was also true for ring width sequences on different lobes of the same specimen. Unique to juniper compared to most pine species is the presence of multiple growth “lobes” on a single trunk. These lobes are joined at the core of the trunk but are separated by voids which become larger as the tree grows. Annual growth is not consistent around the entire perimeter of the trunk, but instead, can occur at different rates on each lobe during the same growing season. This results in very erratic growth patterns, making the building of standard ring-width chronologies out

Figure 2: Topographic map showing the location of the Upper Powder Springs Drift Fence, rock cabins, and round horse corral (after Murcray 1993).
Preparation of the collected specimens followed standard methods (e.g., Glock 1937; Stokes and Smiley 1968). A variable power, 7x-30x binocular microscope was used to count and measure the rings to the nearest 0.05 mm, beginning with the innermost growth ring and ending with the last growth ring. Two or more ring-width sequences were measured on each analyzed specimen. These are designated with the sample number followed by the sequence letter (e.g., Specimen DC1-A, DC1-B, etc.). In general, ring-width sequences from both a “right” and “left” ray from the same slab face, but on different lobes, were measured, and when possible, sequences from both ends of the specimen slab were also measured.

The two live specimens (DC1 and DC5) used to date construction of the Drift Fence are described below.

**Specimen DC1**

Specimen DC1 is a juniper slab from a large limb which had been partially cut into with an ax and bent over to form a fence rail. The limb continued to grow and was alive when collected in 1994. Three sequences were measured and construction dates were obtained from sequences DC1-A and DC1-C.

Sequence DC1-A is located on a single lobe on the distal end of the specimen (distal is that end of the specimen closest to the axe cut and farthest from the trunk of the tree). When the limb was cut and bent over to form the fence rail, enough cambium and bark remained intact to provide nutrient flow to the distal portion of the limb. The tree continued to grow, adding rings only on the intact side of the limb, creating the “lobed” shape of the specimen. Ring No. 1 is the first extant ring at the edge of the ax cut and represents growth prior to construction of the Drift Fence. Ring No. 323 is the 1993 growth, long after fence construction (Figure 5).

Disruption of ring growth caused by cutting the limb during fence construction is visible as a sequence of very narrow rings. The most pronounced of these narrow rings is No. 249. The bark originally covering rings 1-248 sloughed off after fence construction because growth ceased in that portion of the lobe. Live bark covered the growth rings succeeding Ring No. 249 through the last growth ring at No. 323. The constricted ring growth centered on Ring No. 249 resulted from a change in the growth pattern caused by...
partially severing the limb for use in the Drift Fence. Ring No. 249 was formed after the trauma occurred but before the tree had recovered enough to resume normal growth. It corresponds to A.D. 1919, which should be considered the latest possible construction date for this fence segment.

Sequence DC1-B is located on the proximal end of the specimen. It was measured from the center growth ring to the 1993 growth ring, for a total of 655 rings. No trauma is visible on this sequence, which is well below the ax cut and was not affected. The measured radius is 23 cm long. The tree began growing before A.D. 1338. This particular specimen did not appear to be exceptionally old compared to other live, standing dead, and fallen dead trees in the area. Based on this specimen, it is likely that junipers exist in the Wyoming Basin that are 1000 years old.

Sequence DC1-C is also located on the distal end of the specimen, but on a different lobe than Sequence A (see Figure 5). Ring No. 1 existed prior to when the limb was cut for use in the fence (Figure 6). Ring No. 105 is the 1993 growth. Several rings, beginning with Ring No. 1, had to have been intact enough to preserve the cambium after cutting so that growth continued. The maximum number of years that can have passed since the limb was cut is 105, suggesting that A.D. 1888 predates the year this specimen was cut for trauma corresponds to A.D. 1891. The trauma on this segment is very pronounced, suggesting that 1891 should be shortly after fence construction. This date also corresponds well to the historical evidence presented below. The restricted rings on Sequences A and C appear to represent the same approximate period in the tree’s growth and are assumed to result from the same trauma event (i.e., fence construction).

**Specimen DC-5**

Specimen DC5 is a juniper slab obtained from a tree apparently intended for use in the Drift Fence but never utilized. It consists of a limb cut partially through and then bent over, similar to Specimen DC1. It continued to grow until collected in 1994. Two ring-width sequences were measured. Sequence DC5-A was measured on the distal end of the specimen. Ring No. 1 existed prior to when the limb was cut for use in the fence (Figure 6). Ring No. 105 is the 1993 growth. Several rings, beginning with Ring No. 1, had to have been intact enough to preserve the cambium after cutting so that growth continued. The maximum number of years that can have passed since the limb was cut is 105, suggesting that A.D. 1888 predates the year this specimen was cut for
Sequence DC5-B was measured on the proximal end of the specimen. Ring No. 1 is the center growth ring, and Ring No. 416 was formed in 1993. No trauma was present. The tree started growing prior to A.D. 1577.

**INTERPRETATIONS**

Based on similarities to aboriginal big game procurement traps and historic structures used to contain domestic horses, a use associated with large animals has always been proposed for the Drift Fence. The only physical evidence for function are structural design and location in relation to the local topography, both of which must reflect the behavior and management of large animals. No temporally diagnostic cultural material or features can be directly associated with the structure. Consequently, structural design and construction dates became the crucial pieces of data on which interpretations could be based.

Three estimates from two tree-ring specimens suggest that construction occurred between A.D. 1888 and 1919. These late dates suggest a Euroamerican association. If so, horses are the most likely animals to have been contained by the Drift Fence. However, the structure is extensive and the dated tree-ring samples may only reflect the latest maintenance and use of the fence. Consequently, multiple uses through time had to be considered.

Initial speculation suggested the Drift Fence was associated with aboriginal big game procurement (Darlington and Murcray 1993; Murcray 1993). This suggestion was based on structural similarities between the Drift Fence and known pronghorn and bighorn sheep traps (e.g., Pendleton and Thomas 1983; Darlington, 1984; Frison 1991; Arkush 1995). Drive lines made of sagebrush, juniper, pine, and rocks were used to control animal movement, and traps or impoundments were used to contain the animals while they were dispatched. However, no traps or impoundments associated with the Drift Fence have been located and there are no structures along the route which would have made effective blinds [see Murcray (1993) and Darlington and Bodyfelt (1998) for a discussion of these].

![Figure 5: Photograph of Sample DC1 showing measured lobe sequences A and C, that portion of the limb cut with an ax during fence construction, and the limb portion which continued to grow until the sample was collected in 1994.](image)
of other cultural features in the area].

A bigger problem is that large game procurement strategies must be predicated on the escape behavior used by the target species (e.g., Frison 1991:235, 239-265). Drive lines, traps, impoundments, and ambush sites must be placed where the animals are willing to go, especially when pursued. Unlike domestic stock, it is difficult to drive large game anywhere they do not want to go. If the Drift Fence was used to procure big game, its design would reflect the escape behavior of those animals. Conversely, if the structure was used to contain domestic stock such as horses, their behavior and associated human activities would be reflected in the Drift Fence. Because initial investigations suggested the Drift Fence was used in big game procurement (Murcray 1993), a discussion of game behavior in relation to the fence is appropriate.

**PRONGHORN PROCUREMENT**

Pronghorn are the least likely species amenable for procurement using the Drift Fence. The structure is located in rocky, tree covered terrain usually avoided by pronghorn. Their natural escape strategy is the open where visibility is good and they can use speed to their advantage. Pronghorn are not comfortable jumping downed timber or rock outcrops and must be conditioned through experience to jump small fences. When spooked, they will never deliberately run into rocky or timbered ground where footing and visibility are poor. Rather, they will seek open areas where they can both see and outdistance any predators, including man.

These observations are supported by comparisons of the Drift Fence with the Bridger Antelope trap located near Evanston, Wyoming (Frison 1991:243), and pronghorn traps in the Mono Basin of California (Arkush 1995). The Mono Basin and Bridger traps are located in more open, flatter terrain, and are constructed very different from the Drift Fence. They consist of V-wing drive lines made of juniper and/or sage which converge to form a circular enclosure several hundred feet in diameter. No rock outcrops and little timber is present to impede antelope movement or visibility. In contrast, the Drift Fence is located in rough, rocky, timbered terrain unlikely to be used by pronghorn under any circumstances.

**DEER AND ELK PROCUREMENT**

Deer, and to a lesser extent elk, seek cover
when pressed, and the ridges on which the Drift Fence is constructed would have provided good escape cover. However, both species routinely jump obstructions much higher than the Drift Fence. Consequently, control of deer or elk using the Drift Fence would have been difficult. Fortuitous deer and elk procurement may have worked by strategically placing people along the fence to keep the quarry going parallel to the ridge, in which case, the fence could have helped control the animals. But other techniques would have been just as effective without the labor expenditure invested in the fence.

**BIGHORN SHEEP PROCUREMENT**

Sheep seek higher, rougher ground when pressed, and the ridges where the Drift Fence is located would have provided the necessary escape cover. Also, sheep are more reluctant to jump high obstacles than are deer and elk, and can easily be controlled with small fences and rock cairns (e.g., Frison 1991: 246-258). The Drift Fence is both strategically located and was structurally sound enough to control bighorn sheep. However, there are no traps where the animals could have been contained and dispatched (e.g., Darlington 1984). The fence represents considerable labor investment, and if used for this purpose, traps would surely have been constructed. It is unlikely the Drift Fence was used to procure bighorn sheep.

**DOMESTIC STOCK (horses)**

It has also been suggested the Drift Fence was built by Native Americans to either pasture riding stock or to catch wild horses. Powder Springs is located in traditional Shoshone and Ute Indian territory, and by the early 1800s, these groups were generally well mounted. Aboriginal use of the area before the reservation period (i.e., 1868 for southwest Wyoming) is well documented by the presence of artifacts, features, and rock art (Murcray 1993; Darlington et al. 1998). However, by the early 1870s the Shoshone were increasingly restricted to the Wind River Reservation in central Wyoming (Trenholm and Carley 1964:219-222). The Utes of northeastern Colorado were relegated to reservations in Utah about the same time. Consequently, a Native American presence in the Powder Springs area would have been ephemeral by the mid-1870s, prior to the known construction dates for the Fence. Also, the authors know of no early historic accounts of Native Americans building similar enclosures.

A late 19th century Euroamerican use as a horse pasture is more likely. The earliest mention of Powder Springs may have been by John C. Fremont on his way east from California in 1844 (Fremont 1845:280[174]). On June 9th, 1844, he camped on upper Vermillion Creek, west of Powder Springs. The next day, on the 10th, he stopped for noon at a “spring of bad water” in scattered cedar trees (junipers), which may have been Powder Springs. The night of the 10th he camped in a grove of cottonwood trees on the Little Snake River, which he called the Elk Head, 10 miles east of Powder Springs. The Latitude taken by Fremont on the 10th (evening?) is 41° 01' 48" (Fremont 1845:327 [174]), which is close to that of Powder Springs. If Fremont nooned at Powder Springs, the ten miles to the Little Snake River would have been right for half-a-days travel with a pack string.

Fremont’s mention of scattered cedar trees and a “spring of bad” water fits a description of Powder Springs given by J. S. Hoy 31 years later. Hoy rode by Powder Springs in 1875 while on his way to Browns Hole from the Little Snake River (Hoy 1952:141-142), perhaps following the same route as Fremont. He suggests that Powder Spring was so named because it smelled like burning sulphur, the primary ingredient in black powder. He recommended it as a camping place because there were no bugs, perhaps due to the sulphur smell. However, it is unclear if this was Upper or Lower Powder Spring. The smell was probably due either to natural gas and oil seeps contaminating the water or from burning, underground coal beds. An article in the Rock Springs Rocket dated 1930 mentions a place known as “Rotten Springs”, which may be Powder Springs. The seepage of natural gas and oil was so great at this spring that it was possible to light the gas with a match.

Neither Hoy or Fremont mention any structures at Powder Springs. Fremont’s expedition would have pre-dated the known construction of the Fence by at least 40 years, Hoy by a decade at most. Dunham (1977:166-167) mentions that Crittenden, a rancher in Browns Hole, had a horse camp at Powder Springs, but gives no other details. This would have been after ca.1880 when the cattle industry was well established in Browns Hole (Burroughs 1962:14).

According to Burroughs (1962:122-123), the outlaw Butch Cassidy built a cabin in a meadow near Upper Powder Spring. The meadow is said to have provided feed for several saddle horses year-around. Dunham (1977:243) also mentions that Cassidy had a
stone cabin on Powder Mountain, northwest of Powder Springs. However, that reference may only refer to the Upper Powder Spring cabin. There are three rock cabins and a dugout in the Powder Springs area, giving support to these claims. Two of these rock cabins are located next to Upper Powder Spring, fitting the description of Cassidy’s cabin given by Burroughs.

The two cabins at the Upper Spring have been scavenged for rock, leaving only remnants of the foundations. The other rock cabin is located 3/4 of a mile south of Upper Powder Spring, on the head of a small tributary of Powder Wash (see Figure 2). It is in good shape because of its isolation. No roads lead to it. The dugout is located at Lower Powder Spring. It is barely visible as a hole in the west bank of the creek within 100 ft of the rock ledge at the spring. The remains of a log roof support and front-facing rock are all that are left of the structure. The original dugout probably measured about 10 ft long and 6-8 ft wide and the rock cabins about twice that size. Based on approximate manufacture dates for cans and glass debris, the three cabins and dugout appear to have been occupied around the turn of the century.

Historic accounts mention Powder Springs as a hideout along the Outlaw Trail between Robbers Roost in southern Utah, and the Hole-in-the-Wall west of Kaycee, Wyoming. Kelly (1959:203) reproduces a letter written by J. S. Hoy to the Denver News, published on March 11, 1898. A portion of the letter states that “The Roost at Powder Springs consists of a dug-out and a corral.” The dugout at Lower Powder Spring is the one most likely referred to by Hoy. Whether or not the Drift Fence is the corral Hoy refers to cannot be determined, but it is unlikely. Corrals, by popular usage, are small structures built to hold horses or cattle while they are being caught or worked. The Drift Fence enclosure, because of its size, would more likely have been called a pasture.

There is a round horse corral one half mile south of Upper Powder Spring (see Figure 2). The corral is located on the east bank of Powder Wash where the creek enters a narrow, rocky canyon. The extant remains consist of 14 posts and some wire located on a low, flat bench above the creek. The corral encompasses an area about 100 feet in diameter and is round after the pattern usually seen in horse corrals. Wings leading into the corral are still visible. The west wing consists of seven standing posts which extend northwest from the corral gate, cross the creek, and merge with the stacked juniper forming the drift fence at the base of the ridge. The north wing consists of two posts and barbed wire which line up with the corral gate. These posts parallel the east side of Powder Wash to the base of the ridge and line up with remains of the Drift Fence approximately 100 m northeast of the last post. Both wings are approximately 200 meters long and were placed to funnel horses from the Drift Fence pasture into the corral. The third rock cabin, mentioned above, is located ¼ mile southwest of the corral and is no doubt associated with its use.

Based on barbed and woven wire attached to the posts, the corral was used through the 1940s. One piece of wire on the west wing is older, perhaps dating to around 1900, while the other wire appears more modern (i.e., 1930-40). Sagebrush growing in the corral suggests it hasn’t been used for 50 years or more. The corral was probably used by local ranchers long after the Drift Fence pasture was abandoned.

In its original condition the Drift Fence was structurally sound enough and its design is appropriate for use as a horse pasture. The Fence’s placement along the rocky ridge system would have served dual purposes. First, the fence line would have been close to the junipers used in its construction. Second, rock ledges and the natural terrain could have been (and were) incorporated into the design, making construction easier and adding to the security of the fence. The enclosure encompasses a broad valley with good grass and water (Upper Powder Spring). The standing posts and linear scatters of wood that line up with known segments of the Drift Fence suggest that barbed wire fencing may have been used in the open areas.

A single staple was observed along the postulated fence line west of Upper Powder Spring, and a small piece of barbed wire was found next to the fence near the Skull Creek Road. The wire is of modern design but unknown age. Barbed wire was introduced during the 1880s and was first used to fence small pastures long before it was common to fence larger allotments. If segments of the Drift Fence were constructed using posts and wire, the posts and wire were scavenged for use elsewhere after the cabins were abandoned in the early 1900s.

The cabins and round corral strongly suggest the Drift Fence was a horse pasture. But a pasture of this magnitude would have been required only if Upper Powder Spring was occupied on a regular basis, with a consequent need to pasture a large number of
horses. The Powder Springs “roost”, according to Burroughs (1926:122), Kelly (1959:130), and Dunham (1977:95) was originally established by Dick (Bill?) Bender (or Benda), perhaps in the early 1880s. Bender was a well known outlaw of the period, with followers who are referred to as the Bender gang. The three rock cabins at Upper Powder Spring and the dugout at Lower Powder Spring give physical evidence for these claims. Hoy’s 1875 horseback trip makes no mention of anyone living at Powder Springs at that time. His trip may have been before Bender’s occupation of the area.

Local legend suggests that Matt Warner, a well-known outlaw of the time, occupied the dugout at Lower Powder Spring (Gorman Finely, personal communication). This is supported by a Quit Claim deed issued by Matt Warner to H. H. Metcalf for the sale of 80 acres in the S½ SW¼ of Section 14, T12N, R97W, encompassing Lower Powder Spring. Compensation was $150. The instrument was filed on October 12, 1885, and the date of record is December 19, 1897. It was witnessed by E. H. Rife, a rancher in the Cold Springs Mountain area west of Powder Wash. The Quit Claim deed is on file at the Sweetwater County Courthouse, Green River, Wyoming.

There is also a Quit Claim deed on file at the Uintah County Courthouse in Vernal, Utah, dated August 1885. It transfers the assets of the Pot Creek Horse Company from E. H. Rife and A. J. Crittenden, to H. H. Metcalf for the sum of $20,000. This Quit Claim included all interest in the ranch known as the Powder Springs claim, consisting of 80 acres, then in the possession of Matt Warner (DeJournette 1996:186-187).

The two Quit Claim deeds no doubt refer to the same or a related transaction. The 80 acres at Lower Powder Spring was probably filed on under the Pre-emption Act of 1841. This act allowed citizens to squat on public land, surveyed or unsurveyed, until it was put up for sale by the government.

The fact that Matt Warner had a squatters claim at Lower Powder Spring does not suggest that he built the Upper Powder Spring Drift Fence, but it does suggest significant occupation of the area in the 1880s. Warner mentions in his autobiography (Warner 1940) that he sold his horse ranch for $20,000 in the mid or early 1880s, which apparently included the squatters claim at Lower Powder Spring.

Warner sold out under the impending threat of arrest. He had already been involved in cattle rustling and had nearly killed a Mexican in a gunfight over a horse. Warner does not mention Powder Springs by name, but does allude to his horse ranch in the general area. Dick Bender and his gang were probably occupying one of the cabins at Upper Powder Spring at that time.

Actual events and people at Powder Springs are elusive except for the Strang and Valentine murders. A summary of the story bears repeating because it establishes the high probability for a horse pasture at Powder Springs. The following account is taken from Kelly (1959:196), Burroughs (1962:166), Dunham (1977:260-262), and DeJournett (1996:304-306).

Willie Strang, a teenage boy, had accompanied a small-time outlaw by the name of Pat Johnson to the Hoy Cow Camp on upper Willow Creek, north of Browns Hole. Johnson had been drinking. In a playful mood, young Strang knocked the water dipper out of Johnson’s hand. Johnson pulled his revolver, and a bullet caught Strang in the back. He died within the hour. This was on February 18, 1898.

Worried about the killing, Johnson left Willow Creek for Powder Springs, accompanied by Jack Bennett, another small-time outlaw. At Powder Springs they ran into Harry Tracy and Dave Lant who had recently escaped from a Utah prison. They arranged with Bennett to buy supplies and meet them on Douglas Mountain, located near Lodore Canyon in the Browns Hole area. After meeting at Douglas Mountain, the four planned to go to Robbers Roost in southern Utah. Bennett went to buy supplies and Tracy, Johnson, and Lant headed for Douglas Mountain.

Meanwhile, Sheriff Nieman of Routt County, Colorado, had formed a posse consisting of Valentine Hoy and several other men. They jumped Lant, Johnson, and Tracy in the rough canyons of Douglas Mountain, setting them on foot and forcing them to hole up in the rocks. Nieman and the posse crept over the rocks toward the fugitives, Hoy in the lead. Hoy showed himself, and caught a bullet through the heart from Harry Tracy’s rifle. Nieman and the posse retreated to the Bassett place in Browns Hole to spend the night.

Bennett had procured a pack horse and supplies, evidently in Rock Springs, and stopped at the
Bassett place on his way to meet Johnson, Tracy, and Lant. He wasn’t aware that Valentine Hoy had been killed. Bennett was arrested and held at Bassett’s while the rest of the posse went to retrieve Hoy’s body. Around noon, four masked men came in, grabbed Bennett, and put a gunny sack over his head. He was left hanging, with a rope around his neck, from the crossbar of the gate into the Bassett yard.

Left on foot, Lant, Tracy, and Johnson headed back to Powder Springs where they hoped to get horses. Nieman and the posse caught up with them on the flats four or five miles south of the springs. All three were arrested.

The Hoy and Strang affair strongly suggests that horses could always be obtained at Powder Springs, and perhaps even saddles and bridles. Hence, the incentive for Lant, Tracy, and Johnson to walk through the cold and snow the 35 miles from Douglas Mountain to Powder Springs. If so, a horse pasture, such as the Drift Fence enclosure, would have been the only way to keep horses from drifting out of the Powder Springs area.

After the Strang and Hoy murders, J. S. Hoy, brother of Valentine, wrote a letter to the Rocky Mountain News in Denver. He suggested that if a thousand dollar reward were placed on the outlaws in Browns Hole they would quickly be rooted out. When the fellows at Powder Springs heard of the letter, they raided one of Hoy’s cow camps, stole everything they could carry, and destroyed the rest (Dunham 1977:165-266). No reward was ever offered, but after 1898, Powder Springs and Browns Hole were no longer the safe havens they had been in the past.

Another mention of Powder Springs occurred during the summer before the Hoy and Strang murders. Bob DeVine, foreman of Governor Carey’s CY Ranch near Casper, Wyoming, led a group of men into the Hole-in-the-Wall in the south Bighorns. They gathered all the cattle they could find and killed one rustler. Finding the Hole-in-the-Wall too hot, Flatnose George Curry and 75 men left the Hole-in-the-Wall for “Butch Cassidy’s headquarters” at Powder Springs. They robbed sheep camps along the way. That was in August 1897 (Kelly 1959:129-130; Dunham 1977:236).

The figure of 75 men seems large, but even if doubled or tripled by time and legend, this is still a large number of men and horses occupying the Powder Springs area within the time frame under consideration. They apparently took over the Crittenden horse camp, which was abandoned. Some of these men may still have been at Powder Springs when Strang and Hoy were killed.

Other notables passing through and staying at Powder Springs include Ben Kilpatrick, Harry Longbaugh (the Sundance Kid), Harvey Logan, and Elza Lay. All were notorious during the 1880-1890s for everything from horse and cattle rustling to bank and train robbery. The McCarty brothers (Tom, Bill, and Fred?) apparently wintered one year at Powder Springs with “old man Bender” (Kelly 1959:352). We can assume it was routine for many others to winter there as well.

Based on a reading of the literature, it would not have been uncommon for five or more men to be staying at Powder Springs at any given time. A larger residency might be expected during the winter, including horses, than during the summer. If so, a pasture to keep the horses from drifting would have been necessary, and was well within the capabilities of the men living there.

Of interest in this regard is the approximate number of horses a man living at Powder Springs would require to be well mounted. Matt Warner (1940) gives an excellent account regarding the use of horses when robbing banks. They always had one or two spare saddle horses for each man, and one or two pack horses loaded with food and grain. Horses are bred for speed, not endurance. A hard run of ten to fifteen miles, carrying a rider, will exhaust even a good horse. When pulling bank jobs, the extra horses were hidden in a grove of trees several miles outside of town. The plan was to reach the spare horses with enough time to saddle fresh mounts. Riding fresh horses, they could quickly distance themselves from the jaded mounts of the pursuing posse. Their own tired mounts, without the burden of riders, easily kept up. A foray such as this could cover more than 500 miles in the space of one or two weeks. Horses used hard like this will require a week or more rest. A horse pasture at Upper Powder Spring would have been ideal. Wornout stock could have been turned lose in the pasture and fresh mounts caught as needed.

Precedence for constructing corrals made of juniper is given by Burroughs (1962:24). Isom Dart, who lived in Browns Hole, constructed a “make-shift corral built of dead cedar snags, sagebrush, and a
couple of lariats...,” to hold stolen horses. Dart’s corral was located somewhere on the North Platte River in eastern Wyoming. He was later ambushed and killed, probably by Tom Horn. A similar corral made of juniper tied together with wire is located several miles south of Rock Springs in the mouth of a steep ravine. It probably dates to the first part of the 20th Century.

De Journette (1996:188) mentions an “Outlaw Pasture” used during the 1880-1890s. It was located in Dead Horse Draw, on Diamond Mountain southwest of Powder Springs. The pasture was made from brush and cedars (juniper) woven together, evidently in the same manner as the Upper Powder Springs Drift Fence. DeJournette says that some thought it was an Indian pasture later used by outlaws. However, the Indian association is merely speculative while the outlaw connection appears real. The same argument for an Indian connection has been applied to the Upper Powder Springs Drift Fence. While possible, there is no supporting historical or ethnographic evidence to suggest that Indians built fences to pasture horses prior to the reservation period.

CONCLUSIONS

Dendrochronological and historic research suggests the Upper Powder Spring Drift Fence is a horse pasture built during the latter part of the 19th century. J. S. Hoy’s mention of a “corral” at Powder Springs is intriguing. At face value it could be anything from a small holding pen to something as large as the Drift Fence. Regardless, it documents the presence of horse corrals and/or pastures at Powder Springs in the 1890s, which corresponds to the construction dates obtained from tree-ring analysis. Exactly who constructed the Fence is problematic. Dick Bender may have had the longest residency and is a likely candidate. Butch Cassidy is said to have built a cabin at Upper Powder Spring and Matt Warner filed on a homestead at Lower Powder Spring during the same period. Crittenden had a horse camp at the Springs. The killers of Willie Strang and Valentine Hoy headed for Powder Springs to get horses after being left afoot by Nieman’s posse, suggesting horses were routinely pastured there.

The Drift Fence encompasses good water and pasture at Upper Powder Spring and is associated with a round horse corral. Based on extant remains, the original fence would have been more than adequate to hold most saddle horses. Several horses could have been kept year-around in the enclosure and more on a seasonal basis. This aspect is mentioned by Burroughs in relation to Butch Cassidy’s cabin at the Upper Spring. Worn-out horses could have been turned loose to rest and fresh mounts caught as needed without the necessity of day herding.

It is doubtful that a similar complex of cabins and fences associated with the “outlaw” aspect of the early west exists anywhere else. The activities pursued by Cassidy, Warner, the McCartys, and others were very much part and parcel of the early settlement of Wyoming, Colorado, and Utah. The mystique they left characterizes the West, and is heavily exploited by the modern tourism industry. Their contributions to society can be debated, but their actions were no less nefarious and often interwoven with those of the “respected” big cattlemen, railroaders, and bankers.

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